

REMARKS

Claims 1-20 are pending in this Application. Reconsideration and further examination of the subject patent application in light of the present Amendment and Remarks is respectfully requested.

Rejections under 35 U.S.C. §112

Claim 1 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In response, claim 1 has been amended as suggested by the Office Action.

Rejections under 35 U.S.C. §102

Claims 17-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,721,783 to Anderson. Applicant respectfully traverses these rejections.

In response, independent claim 17 has been further limited to “a wireless transmitter that wirelessly transmits an audio signal from the microphone mixed with a pilot tone.” Mixing of the audio signal from the microphone with a pilot tone is discussed in paragraph [0051] of the specification and is shown in FIG. 7.

Claim 17 has also been further limited to “a CPU that digitally encodes the pilot tone with a repeating frame of data containing a plurality of status indicators of the wireless microphone provided by the CPU, said plurality of status indicators disposed within respective predetermined locations of the repeating frame. Independent claim 19 has been similarly limited. The digital

modulation of the pilot tone is discussed in the Abstract of the specification. The predetermined locations of the status indicators is shown in Table I of the specification.

Claims 17-20 are now clearly differentiated over Anderson. For example, the modulation of a pilot tone with an audio signal and with a repeating frame of data makes the most efficient use of the limited spectrum allotted to wireless microphones.

In contrast, Anderson is limited to a hearing aid coupled to a cordless or cellular telephone. Cordless or cellular telephones are required to use two-way voice channels that consume a significant larger bandwidth.

Moreover, cordless and cellular telephones typically use separate control channels because of the need to coordinate channel use with a base station. In contrast, the claimed invention is directed to a transmitter that combines audio with the repeating frame.

For any of the above reasons, Anderson does not do the same or any similar thing as that of the claimed invention. Since Anderson does not do the same or any similar thing as that of the claimed invention, the rejections are now improper and should be withdrawn.

Claims 1-5, 7, 9 and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 6,954,538 to Shiraishi. Applicants respectfully traverse the rejections.

In response, independent claim 1 has been further limited to “transmitting data from the transmitter to the receiver of said audio system and storing said data therein, said data including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” The use of a repeating frame of data is discussed in paragraph [0035] of the

specification. The two or more characteristics is discussed in paragraph [0057] and is shown in the repeating frame of FIGs. 9A-C of the specification.

Claims 1-5, 7, 9 and 11 are now clearly differentiated over Shiraishi. In this regard, Shiraishi is merely directed to an audio analysis and control device. Shiraishi fails to provide any teaching of a repeating frame of data or of the use of two or more characteristics regarding the transmitter within predetermined locations of the repeating frame.

For any of the above reasons, Shiraishi does not do the same or any similar thing as that of the claimed invention. Since Shiraishi does not do the same or any similar thing as that of the claimed invention, the rejections are now improper and should be withdrawn.

Rejection under 35 U.S.C. §103

Claim 6 stands rejected under 35 U.S.C. §103(a) as being obvious over Shiraishi in view of U.S. Pat. Appl. No. US 2003/0190924 to Agashe et al. Applicant respectfully traverses this rejection.

It may be noted in this regard that claim 6 is dependent upon claim 1 and, therefore, includes all of the limitations of claim 1. Claim 1 is limited to “transmitting data . . . including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” Since the Shiraishi transmitted data is not “a repeating frame”, Shiraishi is no longer relevant because Shiraishi fails to provide the same or any similar teaching. Agashe et al. also fails to provide any teaching or suggestion regarding this claim limitation.

Since the combination of Shiraishi and Agashe et al. fail to teach or suggest the claim limitation of “two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame”, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejection is improper and should be withdrawn.

Claim 8 stands rejected under 35 U.S.C. §103(a) as being obvious over Shiraishi in view of U.S. Pat. No. 6,920,134 to Hameleers et al. Applicant respectfully traverses this rejection.

It may be noted in this regard that claim 8 is dependent upon claim 1 and, therefore, includes the limitation of “transmitting data . . . including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” Since the Shiraishi transmitted data is not “a repeating frame”, Shiraishi is no longer relevant because Shiraishi fails to provide any teaching regarding this limitation. Hameleers et al. also fails to provide any teaching or suggestion regarding this claim limitation.

Since the combination of Shiraishi and Hameleers et al. fail to teach or suggest the claim limitation of “two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame”, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejection is improper and should be withdrawn.

Claims 10 and 12 stand rejected under 35 U.S.C. §103(a) as being obvious over Shiraishi in view of U.S. Pat. No. 4,197,498 to Fukui et al. Applicant respectfully traverses this rejection.

It may be noted in this regard that claims 10 and 12 are dependent upon claim 1 and, therefore, include the limitation “transmitting data . . . including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” Since the Shiraishi transmitted data is not “a repeating frame”, Shiraishi is no longer relevant because Shiraishi fails to provide any such teaching regarding this claim element. Fukui et al. also fails to provide any teaching or suggestion regarding this claim limitation.

Since the combination of Shiraishi and Fukui et al. fail to teach or suggest the claim limitation of “two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame”, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejection is improper and should be withdrawn.

Claims 13 and 14 stand rejected under 35 U.S.C. §103(a) as being obvious over Shiraishi in view of U.S. Pat. No. 6,288,641 to Casais. Applicant respectfully traverses this rejection.

It may be noted in this regard that claims 13 and 14 are dependent upon claim 1 and, therefore, includes the limitation “transmitting data . . . including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” Since the Shiraishi transmitted data is not “a repeating frame”, Shiraishi is no longer relevant because Shiraishi fails to provide any teaching in this regard. Casais also fails to provide any teaching or suggestion regarding this claim limitation.

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Since the combination of Shiraishi and Casais fail to teach or suggest the claim limitation of “two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame”, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejection is improper and should be withdrawn.

Claims 15 and 16 stand rejected under 35 U.S.C. §103(a) as being obvious over Shiraishi in view of U.S. Pat. No. 6,337,913 to Chang. Applicant respectfully traverses this rejection.

It may be noted in this regard that claims 15 and 16 are dependent upon claim 1 and, therefore, includes the limitation of “transmitting data . . . including the detected audio signal and a repeating frame of data containing two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame.” Since the Shiraishi transmitted data is not “a repeating frame”, Shiraishi is no longer relevant because Shiraishi fails to provide any similar teaching. Chang also fails to provide any teaching or suggestion regarding this claim limitation.

Since the combination of Shiraishi and Chang fail to teach or suggest the claim limitation of “two or more characteristics regarding said transmitter disposed within respective predetermined locations of the repeating frame”, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejection is improper and should be withdrawn.

Closing Remarks

For the foregoing reasons, applicant submits that the subject application is in condition for allowance and earnestly solicits an early Notice of Allowance. Should the Primary Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, the Primary Examiner is respectfully requested to call the undersigned at the below-listed number.

The Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,

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I hereby certify that this paper(s) is being transmitted via electronic mail to the Commissioner for Patents; P.O. Box 1450, Alexandria, VA 22313-0001 on November 13, 2007.

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